



Model #: VFD055C53A-21

Date: 2020-04-14

| Description  |  |  |                                     |                                  |                           |   |                          |                 |
|--|--|--|-------------------------------------|----------------------------------|---------------------------|---|--------------------------|-----------------|
| VFD-C2000, 5/7.5HP, 3.7/5.5Kw, (HD 7.38/LD 11.88A), 3 Ø 575VAC, 599.0Hz, (V/Hz, VC+PG, SVC, FOC, TQC & PM), c/w PLC, NEMA 1, Frame B |  |  |                                     |                                  |                           |   |                          |                 |
| Manufacturer   | Heavy Duty Output Rating               |  | Normal Duty Output Rating           |                                  | Light Duty Output Rating  |   | Single Phase Duty Rating |                 |
| Delta Electronics  | HD Input Amps Rating                   | 8,4  | ND Input Amps Rating                | 10,0                             | LD Input Amps Rating      | 12,1  | 1 Ø Input Amps Rating    | 8,4             |
|  | Rated HP                               | Rated Amps   | HP                                  | Rated Amps                       | HP                        | Rated Amps  | HP                       | Amps            |
|  | 5,0                                    | 6,9  | 5,0                                 | 8,2                              | 7,5                       | 9,9   | 2,5                      | 3,5             |
|  | Max. HP                                | Max. Amps  | Max. HP                             | Max. Amps                        | Max. HP                   | Max. Amps   | Max. HP                  | Max. Amps       |
| Max. Capacity  | 7,5                                    | 8,3  | 7,5                                 | 9,8                              | 10,0                      | 11,9  | 2,5                      | 3,5             |
| Line Reactor   | Heavy Duty                             |  | Normal Duty                         |                                  | Light Duty                |   | 1 Ø Phase                |                 |
|  | Line                                   | Load   | Line                                | Load                             | Line                      | Load  | Line                     | Load            |
| Model  | KDRB42H                                | KDRAA58L2  | KDRB42H                             | KDRAA48L2                        | KDRB43H                   | KDRAA49L2   | KDRB42H                  | KDRAA52L2       |
| HP Rating  | 7,5                                    | 5,00   | 7,5                                 | 7,50                             | 10,00                     | 10,00   | 7,50                     | 3,00            |
| Max Amps   | 10,0                                   | 7,6  | 10,0                                | 9,0                              | 11,0                      | 11,0  | 10,0                     | 4,8             |
| Inductance uH  | 5370                                   | 4510   | 5370,0                              | 3100                             | 4340                      | 2470  | 5370                     | 6740            |
| Nema 1 Encl.Size   | C2                                     | C1   | C2                                  | C1                               | C2                        | C1  | C2                       | C1              |
| Motor Models Compatible  | Heavy Duty                             |  | Normal Duty                         |                                  | Light Duty                |   | 1 Ø Phase                |                 |
|  | Model                                  | HP   | Model                               | HP                               | Model                     | HP  | Model                    | HP              |
|  | MPP-28                                 | 7,5  | MPP-28                              | 7,5                              | MPOP-33                   | 10  | MPP-18                   | 3               |
|  | FLA                                    | 7,8  | FLA                                 | 7,8                              | FLA                       | 10,8  | FLA                      | 3,4             |
| VFD Dimensions   | Width (mm)                             | Width (in.)  | Height (mm)                         | Height (in.)                     | Depth (mm)                | Depth (in)  | Wgt (Kg)                 | Wgt (lbs)       |
|  | 190                                    | 7,4803   | 320                                 | 12,5984                          | 190                       | 7,4803  | 4,8                      | 11,1384         |
| Input Voltage  | Input Frequency                        | Input Phase  | Enclosure                           |                                  | Control Method            | V/Hz, Sensorless Vector, Closed Loop Vector, FOC (Field Oriented Control), Torque Control, PM Motor Control |                          |                 |
| 470 ~ 600VAC (± 10%)   | 50/60Hz (±5%)                          | 3  | NEMA 1                              |                                  |                           |   |                          |                 |
| Regulated Output Voltage   | Efficiency                             | Motor Current Protection Range   | Stall Prevention Level HD           | Stall Prevention Level ND        | Stall Prevention Level LD | Carrier Frequency   | Accel / Decel Time       | Default Rating  |
| 0.0 ~ 600.0Vac   | ≥98%                                   | 1.19 ~ 11.88 A   | 0 ~ 180%                            | 0 ~ 150%                         | 0 ~ 120%                  | 2 ~ 15kHz   | 0.0 ~ 6000 secs          | Light Duty      |
| Over Torque Level  | DC Injection                           | Braking Chopper  | Equivalent Braking Resistor Circuit | Minimum Braking Resistance Value | Starting Torque @         |   |                          |                 |
| 10 ~ 250%  | 0 ~ 100.0 %                            | Built-in   | 500W 100Ω                           | 93.3 Ω                           | V/Hz                      | SVC   | VC+PG                    |                 |
|  |  |  |                                     |                                  | 0 ~ 250% @ 0.5Hz          | 0 ~ 250% @ 0.5Hz  | 0 ~ 250% @ 0.0Hz         |                 |
| Analog Inputs  |  |  | Analog Outputs                      |                                  |                           | Keypad  | Fault Record             | Reel Time Stamp |
| AVI  | ACI                                    | AUI  | AFM1                                | AFM2                             | DFM                       |   |                          |                 |
| 0 ~ 10vdc  | 0/4 ~ 20ma                             | -10 ~ +10vdc   | 0 ~ 10vdc / 0 ~20ma                 | 0 ~ 10vdc / 0 ~20ma              | Pulsed Frequency          | Removable   | 20 last faults           | Yes             |
| Digital Inputs   |  |  |                                     |                                  | Signal mode               |   |                          |                 |
| Dedicated  |  | Safe Torque Off  | Programmable                        | Control Voltage                  | Sink (NPN) / Source (PNP) |   |                          |                 |
| Fwd, Rev, STO1, STO2   |  | Yes  | 8                                   | 24vdc                            |                           |   |                          |                 |
| Digital Outputs  |  |  |                                     | Built in Controllers             |                           |   |                          |                 |
| DO1  | DO2                                    | DO3  | DO4                                 | Preset speeds                    | Process Control           | PLC   | PID                      | Position        |
| 1NO/NC Form C relay, ≤ 240VAC, ≤ 24vdc   | 1NO/NC Form C relay, ≤ 240VAC, ≤ 24vdc | Optocoupler NPN ≤ 48vdc  | Optocoupler NPN ≤ 48vdc             | 15                               | Thru PLC                  | 10K Steps   | Yes                      | Yes             |
| Communication  |  |  |                                     | Built In Protocol 1              | Built In Protocol 2       | Built In Protocol 3   |                          |                 |
| Comm Port 1  | Comm Port 2                            | Comm port 3  | Comm port 4                         |                                  |                           |   |                          |                 |
| RJ45 (RS-485)  | RJ45 (RS-485)                          | -SG, +SG (RS-485)  | -                                   | Modbus ACSII                     | Modbus RTU                | -   |                          |                 |
| Options  |  |  |                                     |                                  |                           |   |                          |                 |
| Option 1   | KPC-CC01                               | Standard keypad shipped with C2000 series. Also compatible, MS-300 & MH-300.                           |                                     |                                  |                           |   |                          |                 |
| Option 2   | MKC-KPPK                               | VFD-C2000, Keypad Remote Panel Adapter, IP66   |                                     |                                  |                           |   |                          |                 |
| Option 3   | KPC-CE01                               | VFD-C2000, LED English Keypad for C2000  |                                     |                                  |                           |   |                          |                 |
| Option 4   | CMC-EC01                               | VFD-C2000, EtherCAT Communication card, supports EtherCAT protocol                                     |                                     |                                  |                           |   |                          |                 |
| Option 5   | CMC-EIP01                              | VFD-C2000, Ethernet Communication card, supports EtherNet/IP protocol                                  |                                     |                                  |                           |   |                          |                 |
| Option 6   | CMC-MOD01                              | VFD-C2000, Ethernet communication card, supports MODBUS TCP protocol                                   |                                     |                                  |                           |   |                          |                 |
| Option 7   | CMC-DN01                               | VFD-C2000, DeviceNet communication card, 125kbps / 250kbps / 500kbps                                   |                                     |                                  |                           |   |                          |                 |
| Option 8   | CMC-PD01                               | VFD-C2000, PROFIBUS-DP communication card, 9.6kbps-12Mbps  |                                     |                                  |                           |   |                          |                 |
| Option 9   | EMC-COP01                              | VFD-C2000, CANopen communication card, 50kbps - 1Mbps  |                                     |                                  |                           |   |                          |                 |
| Option 10  | EMC-D42A                               | VFD-C2000, IO Extension card, (4DI/2DO), DC 24V  |                                     |                                  |                           |   |                          |                 |
| Option 11  | EMC-D611A                              | VFD-C2000, 6DI extension card, AC 110V power   |                                     |                                  |                           |   |                          |                 |
| Option 12  | EMC-BPS01                              | VFD-C2000, 24VDC External Power Supply Card  |                                     |                                  |                           |   |                          |                 |
| Option 13  | EMC-PG01L                              | VFD-C2000, Encoder Interface card, 5 VDC to encoder, Line-drive 300k pulse/sec. 5VDC 50mA pulse output |                                     |                                  |                           |   |                          |                 |
| Option 14  | EMC-PG01O                              | VFD-C2000, Encoder Interface card, 5 or 12 VDC to encoder, Open-collect 300k pulse/sec. pulse output   |                                     |                                  |                           |   |                          |                 |
| Option 15  | EMC-PG01R                              | VFD-C2000, Resolver Feedback Card; VFD-C, CP   |                                     |                                  |                           |   |                          |                 |
| Option 16  | EMC-PG01U                              | VFD-C2000, Encoder Interface card, 5 VDC to encoder, Line-drive (A,B,Z,U,V,W) . 5VDC 50mA pulse output |                                     |                                  |                           |   |                          |                 |
| Option 17  | EMC-R6AA                               | VFD-C2000, IO Extension card (6 output relays)   |                                     |                                  |                           |   |                          |                 |
| Option 18  | -                                      | -  |                                     |                                  |                           |   |                          |                 |